

## REMARKS

Claims 1, 3, 5, 7, 9, 11, 13 and 15 are pending in the application.

In the Final Office Action, claims 1, 5, 9, 11, 13 and 15 were rejected and claims 1, 3, 5, 7, 9, 11, 13 and 15 were objected to. Claims 3 and 7 were allowed.

In response, claims 1, 3, 5, 7, 9, 11, 13 and 15 have been amended. Claims 17-22 have been added. Applicants submit that no new matter has been added. Support for the amended and newly added claims can be found on pages 28, 41 and 52 of the specification.

### A. Claim Objections:

The Examiner objected to claims 1, 3, 5, 7, 9, 11, 13 and 15. In response, claims 1, 3, 5, 7, 9, 11, 13 and 15 have been amended according to the Examiner's suggestion. Applicants respectfully submit that this objection has been overcome and that it be withdrawn.

### B. §103(a) Rejections:

Claims 1, 5, 9, 11, 13 and 15 were rejected under 35 U.S.C. §103(a) as being obvious over Goodenough et al. (U.S. Patent No.: 5,910,382) in view of Iwata et al. (U.S. Patent No.: 5,807,646). Applicants respectfully traverse this rejection.

Claims 1 and 5 recite a positive electrode material comprising a compound represented by the general formula of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  where  $0 < x \leq 2$  and  $0.5 < y < 0.95$  and an electrification agent in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$ . Claims 9, 11, 13 and 15 recite a positive electrode material comprising a compound represented by the general formula of  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$  where  $0 < x \leq 2$  and  $0.5 < y < 0.95$  and an electrification agent in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ .

None of the cited references disclose an electrification agent as specified in claims 1, 5, 9, 11, 13 and 15. *Goodenough* discloses transition-metal materials used as electrodes in an alkali-

ion secondary battery. While it discloses the use of  $\text{Li}_x\text{Fe}_{1-y}\text{M}_y\text{PO}_4$  as a cathode active material, it does not disclose a cathode active material a compound represented either by  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$  and an electrification agent in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ . On the other hand, while *Iwata* does disclose carbon may be used as a conductor (col. 5, line 27), it does not, however, disclose that an electrification agent should be used in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ .

An electrification agent is added to the starting materials for synthesis of the positive active material. The electrification may be enumerated by carbon, copper and electrically conductively high polymer material. When the amount of the electrification agent is either too low or too high to the proportion of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ , the positive electrode material will be ineffective. Thus, the electrification agent is preferably added in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ . This not only will increase the load characteristics of the positive electrode material, but it also will improve the electrode moldability to achieve a higher capacity for a non-aqueous electrolyte cell. (Spec. 28).

None of the cited references disclose or even suggest that a positive active material comprising a compound of either  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$  and an electrification agent in an amount of 0.5 to 20 parts by weight to 100 parts by weight of  $\text{Li}_x\text{Mn}_y\text{Fe}_{1-y}\text{PO}_4$  or  $\text{Li}_x\text{Mn}_y\text{B}_{1-y}\text{PO}_4$ .


Accordingly, Applicants submit that the claimed invention does not render obvious over the applied references alone or in combination as suggested by the Examiner.

Claims 17-22 all depend directly from claims 1, 5, 7, 9, 11, 13 and 15 and are therefore allowable for at least the same reason that claims 1, 5, 7, 9, 11, 13 and 15 are allowable.

In view of the foregoing, it is submitted that the pending claims 1, 3, 5, 7, 9, 11, 13, 15 and 17-22 are patentable over the references cited by the Examiner. Further, all of the Examiner's objections and rejections have been addressed herein. It is, therefore, submitted that the application is in condition for allowance. Notice to that effect is respectfully requested.

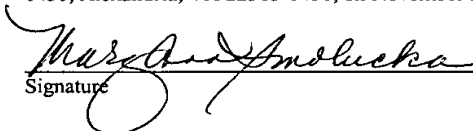
Respectfully submitted,

SONNENSCHN NATH & ROSENTHAL, LLP

 (Reg. No. 45,034)  
Christopher P. Rauch  
SONNENSCHN NATH & ROSENTHAL LLP  
CUSTOMER ACCT. NO. 26263  
P.O. Box 061080 - Wacker Drive Station  
Chicago, Illinois 60606  
Telephone (312) 876-2578  
Attorneys for Applicant

SONNENSCHN NATH & ROSENTHAL, LLP  
P.O. Box #061080  
Wacker Drive Station-Sears Tower  
Chicago, Illinois 60606-1080  
(312)876-2578

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